Wisconsin
Department of Natural Resources

Storm Water Practice Maintenance

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DNR Regulations

Research

Troubleshooting

Construction Site Storm Water Permits

- New Development
- Re-development

Municipal Storm Water (MS4) Permits

- Storm Water Ordinance
- Pollution Prevention Program

Post-Construction Storm Water Technical Standards

Construction Site Storm Water Permits

Long-Term Maintenance

- New development and re-development with post-construction storm water treatment practices
- Develop inspection and maintenance plan (per DNR technical standards)
- Establish maintenance agreement with the municipality
- Submit plan and agreement with permit application

MS4 Permits

Post-Construction Storm Water Ordinance

- Adopt ordinance with long-term maintenance provisions
- Enforce long-term maintenance provisions
- Applicable to new development and re-development permitted after storm water ordinance was adopted

MS4 Permits

Pollution Prevention Program

- Applies to municipal & private practices used in modeling (NR151 and/or TMDL)
- Inventory/mapping
- Inspect practices once per permit term (5 years)
- Maintain practices and enforce agreements
- Keep records

MS4 Options for Private Practices

- Let them do it
- Do it yourself
- Third party?

Problems

- Responsibility
- Funding
- Inspection & Maintenance Contractors
- Record keeping

Solutions

- Educate practice owners
- Identify co-benefits
- Share equipment
- Plan for funding
- Maintenance friendly design

Research

Occurrence and Mechanisms of Constructed Stormwater Ponds that Do Not Effectively Retain Phosphorus

A Technical Report to

Minnesota Pollution Control Agency

Prepared by LimnoTech

DRAFT: June 19, 2019

LimnoTech

Water Environment | Scientists Engineers

EXPLORATION OF THE USE OF TREATMENT WETLANDS AS A NUTRIENT MANAGEMENT STRATEGY IN WISCONSIN

The Nature Conservancy

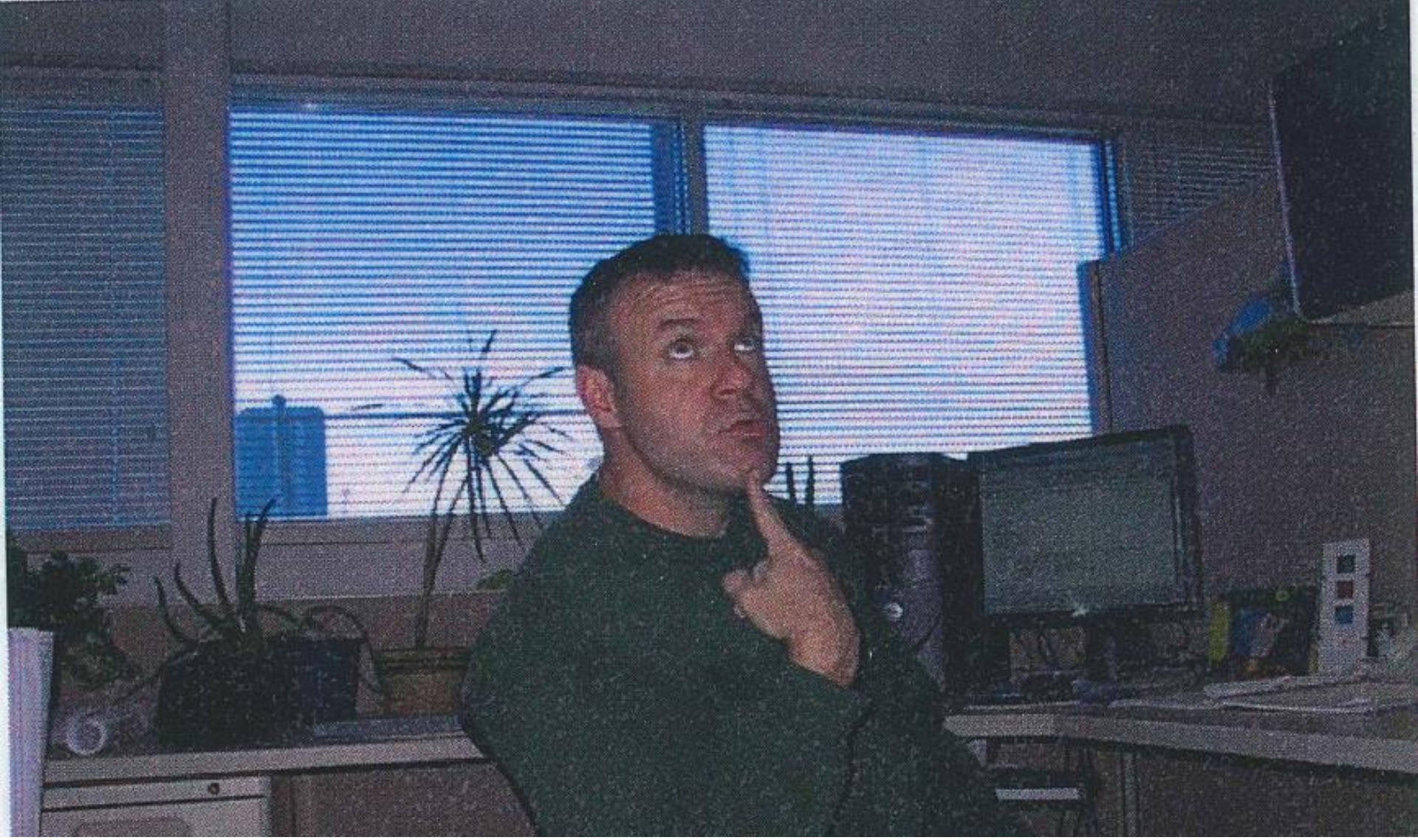
Protecting nature. Preserving life.

Victoria Lubner Ziegler
Natural Infrastructure Fellow
The Nature Conservancy
October 2016

USGS
science for a changing world

Hydraulic, Water-Quality, and Temperature Performance of Three Types of Permeable Pavement under High Sediment Loading Conditions

Scientific Investigations Report 2018–5037



Troubleshooting

Managing accumulated sediment from storm water ponds

In response to increasing sediment in storm water ponds and lack of an established process to regulate sediment removal and use, the DNR developed an innovative rule to help storm water pond owners manage the removal and use of pond sediment. Chapter NR 528, Wis. Adm. Code, Management of Accumulated Sediment from Storm Water Management Structures, establishes a self-implementing system for sediment removal and use.

Anyone with responsibility for a storm water pond or other storm water management structure should understand NR 528 and how it affects them. The rule covers wet and dry detention ponds and infiltration basins, but not landscape ponds on private property.

The process to manage the removal and use of the accumulated pond sediment is simple. NR 528 requires no fee and no paperwork other than the certification form. Sediment managers should keep a copy of their certification form to document the steps taken and end use chosen.

Fill out an electronic certification form. Using the worksheets included in this form choose the appropriate level of certification necessary to comply with NR 528. Many users will only need to select an appropriate end use for accumulated sediment and sign the form. In certain cases, sediment from ponds will need to be sampled before being used. In these cases, an environmental professional (e.g., a consultant) must sample the sediment, determine an appropriate end use and sign the certification form.

- Accumulated Sediment End Use Agreement (Form 4400-248) [PDF].

To help you comply with NR 528, DNR staff have prepared a guidance document outlining the steps required under the new rule.

- Management of Accumulated Sediment from Storm Water Structures (WA-1375) [PDF]

NR 528 resources

- Accumulated Sediment End Use Certification (Form 4400-248) [PDF]
- Management of Accumulated Sediment from Storm Water Structures (WA-1375) [PDF]
- NR 528, Wis. Adm. Code [PDF exit DNR]
- NR 528 Summary Presentation [PDF]


usbank

Questions

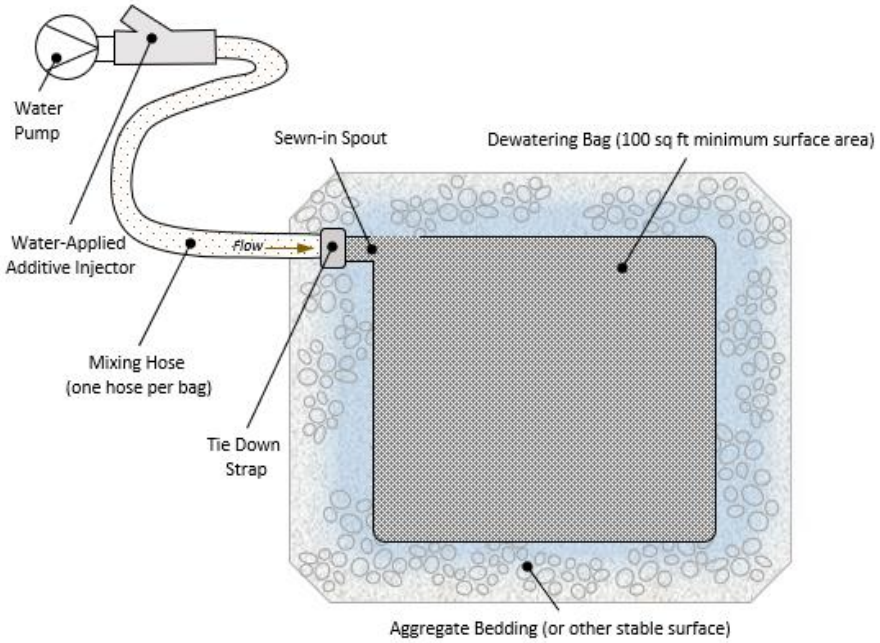
Dewatering Technical Standard 1061

Summary of Changes

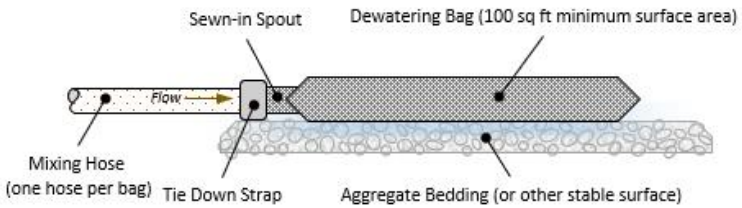
- Consolidate discharge location criteria
- Add internally drained area criteria
- Modify geotextile filter criteria
- Add groundwater dewatering well criteria
- Promote combinations of practices
- Expand O&M section
- Add evaluation criteria
- Add figures

Geotextile Filter Bag with Water-Applied Additive

PLAN VIEW

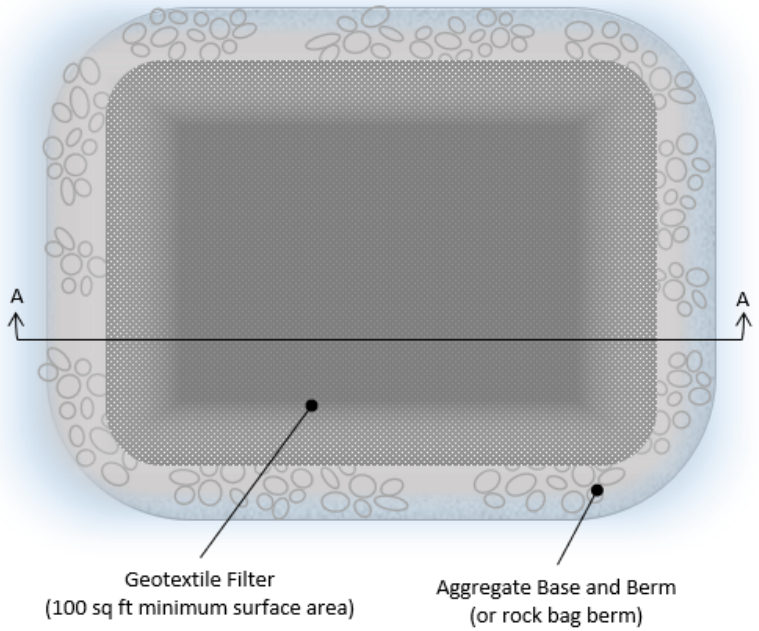


SIDE VIEW



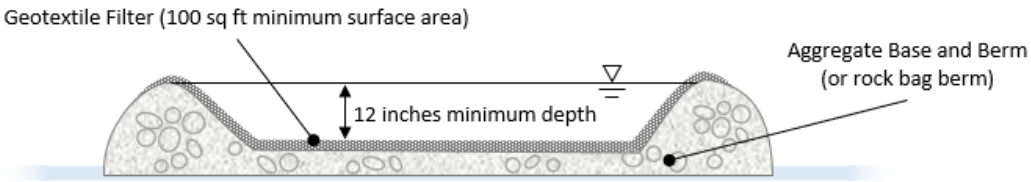
Geotextile Filter Basin

PLAN VIEW



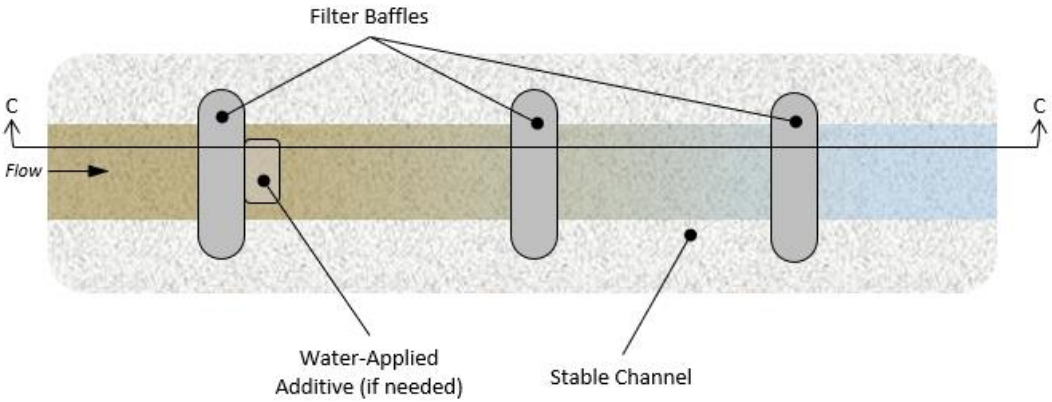
Note: Overlap adjacent geotextile by at least 12 inches.

SECTION A-A

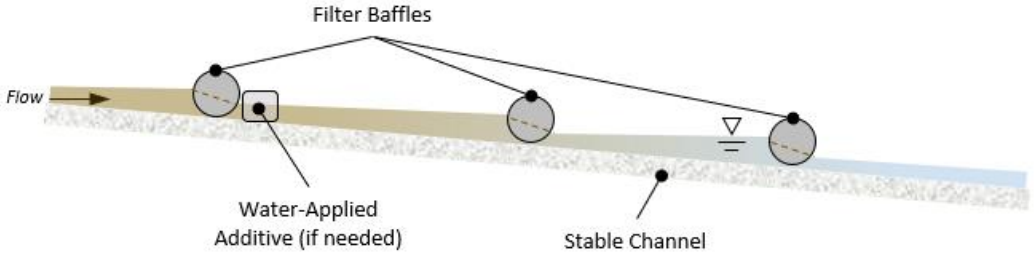


Dewatering Channel

PLAN VIEW

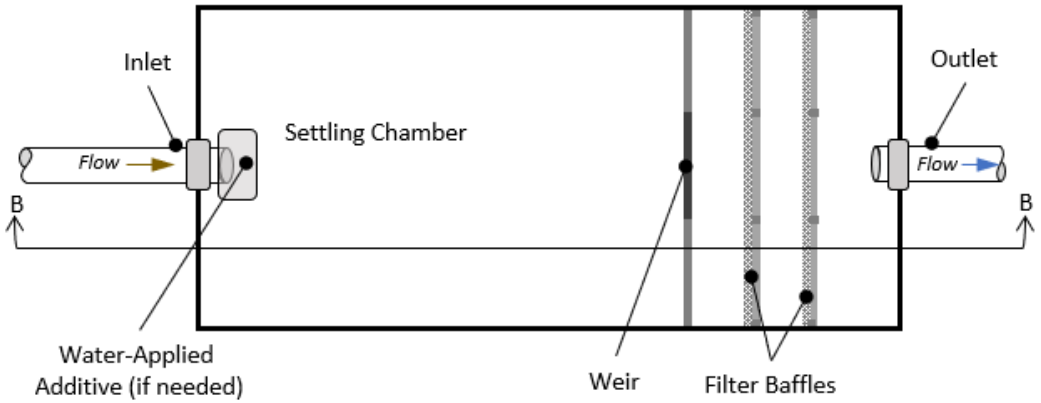


SECTION C-C

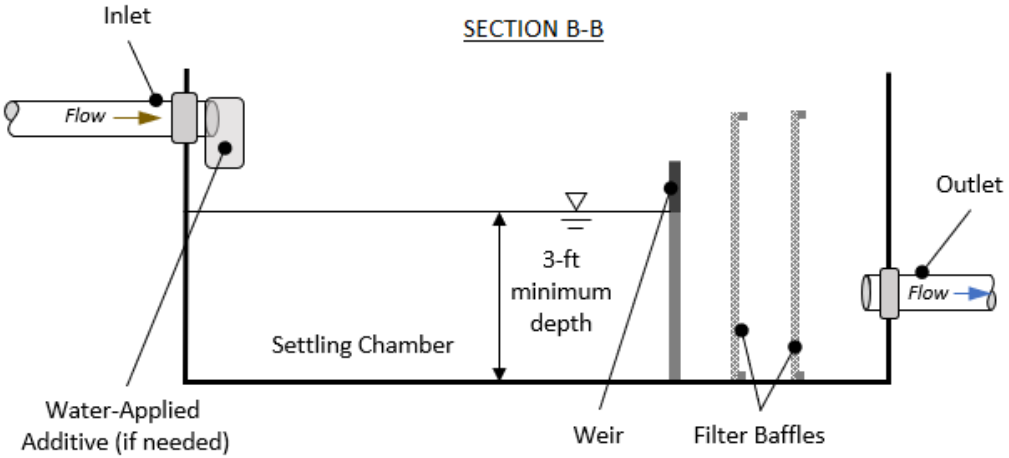


Settling Tank with Geotextile Filter Baffles

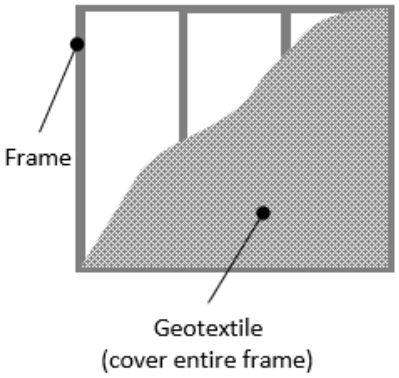
PLAN VIEW



SECTION B-B

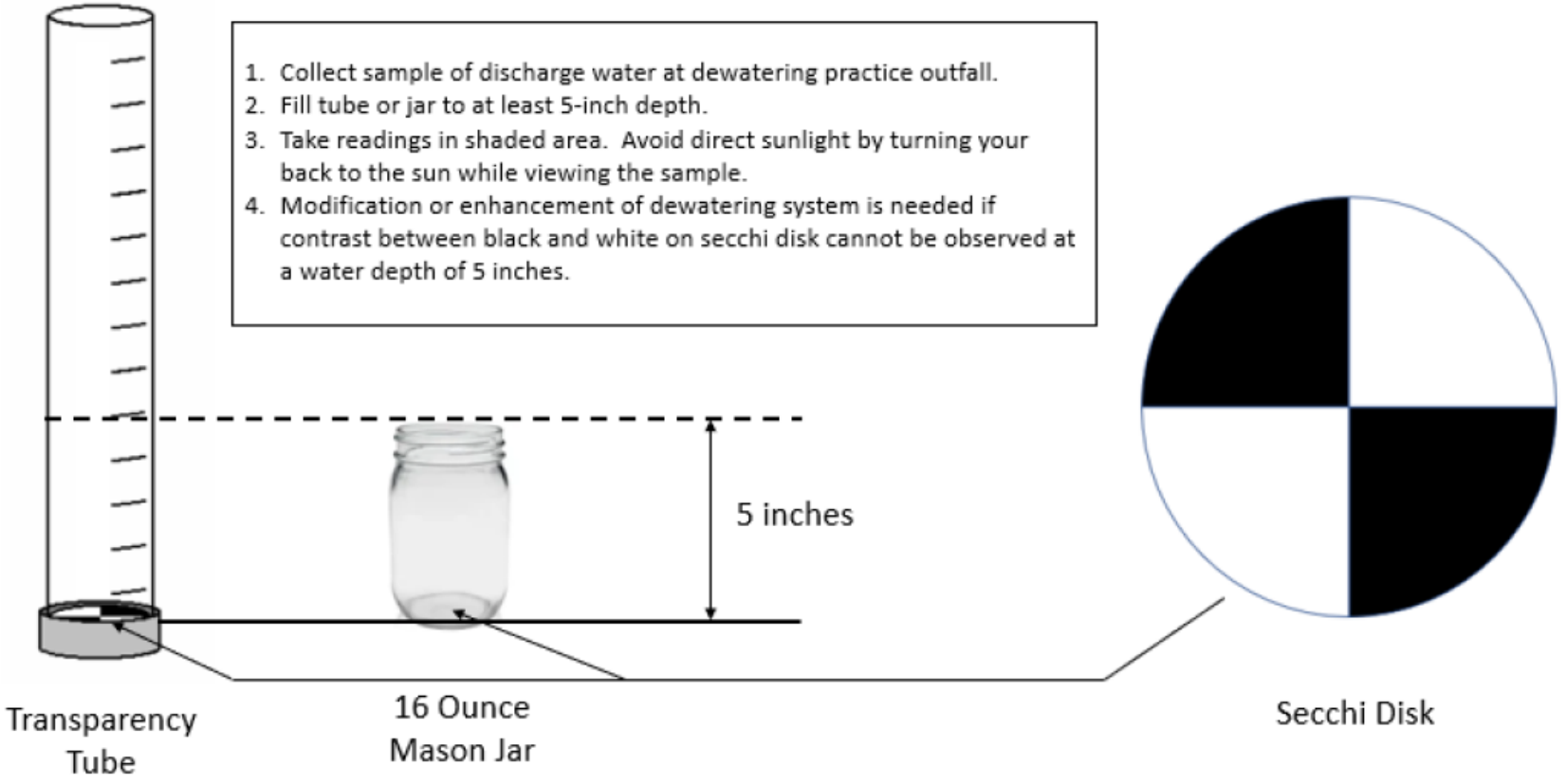


FILTER BAFFLE DETAIL



Sediment Control Effectiveness Using Transparency to Determine Sediment Control Effectiveness

1. Collect sample of discharge water at dewatering practice outfall.
2. Fill tube or jar to at least 5-inch depth.
3. Take readings in shaded area. Avoid direct sunlight by turning your back to the sun while viewing the sample.
4. Modification or enhancement of dewatering system is needed if contrast between black and white on secchi disk cannot be observed at a water depth of 5 inches.



Questions